

UWEC Psyc 372/572: Individual Differences and Behavior Genetics
Summer 2012: 9am – 12pm, HHH 216 (MTWRF)

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Office hours: After class

Reading

There is no textbook for this class. There are a lot of good articles, however. All readings are available on the W drive: Psyc > Bleske-Rechek > Psyc372 readings.

To access the W-drive from an off-campus computer, go to <http://students.uwec.edu>.

Course description and objectives: This course is in the Biological Domain of the psychology major/minor. The course is designed to introduce you to the structure of various individual differences attributes (mental abilities, personality, vocational interests and values), and the behavioral genetic research devoted to unraveling their causal structure. Behavioral genetic research designs (molecular genetic research; and twin, adoption, and combination designs) are unique in their capacity to identify specific genes that influence behavior and to separate out proportion of variance in behavior accounted for by genetic influences, shared environmental influences, and nonshared environmental influences. Upon completion of this course, you should be able to:

- (1) describe different behavioral genetic (twin and family) research designs
- (2) describe criticisms and strengths of different behavioral genetic designs
- (3) describe exemplary results of behavior genetics research
- (4) discuss rationally the personal, societal, educational, and clinical implications of behavioral genetic research findings

UWEC learning goals

UWEC has five interdisciplinary learning goals. This course endeavors to promote them. Students should...

1. communicate effectively
2. demonstrate knowledge of human culture and the natural world
3. engage in creative and critical thinking
4. demonstrate individual and social responsibility
5. respect diversity

Course requirements: Attendance is essential. Your readings and what we talk about in class will not fully overlap. I use class time to expand upon the readings and to introduce new material. We also will use some class time to engage in focused discussion to clarify concepts. I appreciate but do not require notice when you miss class, regardless of the reason. **All material discussed in class may appear on the assessments, even if it is not in the readings. All required reading material may appear on the assessments, even if not discussed in class.** You are responsible for finding out about any announcements that have been made in class, although I will occasionally send out class emails to keep everyone updated at all times. If you miss class, I will not give you my notes or recreate the lecture or class session for you.

In addition to interactive lectures, this course relies more explicitly, on a couple of occasions, on discussion and reflections from you. I expect you to participate in these class discussions. Thus, on a couple of occasions that I have starred on your schedule, I may ask you to send me via email and bring to class one discussion question or reflection over the reading for the day. These questions and reflections will be used to guide our discussion in class, and will be worth some points. We will not be able to get to everyone's discussion question/reflection in class because there are many of us, but I will use a few to help us address important points.

Overall, I expect you to be a good citizen. This includes participating actively in class but not dominating it, as well as having an overall positive attitude toward the course.

Grades:

You will acquire points for your participation in the discussions, as described above. The large majority of your points will come from your review sheets. I expect you to complete these review sheets after class and independently. The review sheets will proceed much more quickly for you if you read the relevant material the night before and come to class that morning. Note that there will generally be some overlap between the readings and what we do in class, but the readings are meant to be just a teaser of all that is relevant to the topic at hand.

I also reserve the right to give you some quick quiz questions here and there if needed, to be used as bonus points.

Grades will be calculated as a proportion of points earned out of total possible.

Grades will be assigned as follows:

	B+	87-89%	C+	77-79%	D+	67-69%		
A	93-100%	B	83-86%	C	73-76%	D	63-66%	
A-	90-92%	B-	80-82%	C-	70-72%	D-	60-62%	F <60%

Please note:

(1) I hold high expectations for my students; (2) The concepts in this class are difficult at times and hence so are the readings and review sheet questions; (3) Performance, and not solely effort, is what determines your final grade; (4) *Whole* numbers are not rounded up. For example, an 89.4 is an 89 and it is not rounded up to 90, so the grade is a B+. An 89.6 is a 90, which is an A-.

Other policies:

(1) I am happy to make accommodations for students with documented disabilities. If you have a disability and are in need of special accommodations, please notify the Office for Services for Students with Disabilities as soon as possible so that we can meet your needs.

(2) I expect you to complete the reading *before* class. Any pop quiz questions will require you to have done the reading. And, as noted above, we will sometimes engage in discussion during class that will require you to have done the reading. If you haven't done the reading, your lack of participation can be irritating for everyone involved. Please do not get behind in the reading!

(3) Review sheets will be completed as individuals, not as pairs or as groups. Unless I state otherwise, the same goes for any other activity. I expect academic honesty. I will act immediately if I suspect that a student has given or received help on an assignment, attempted to leave the classroom with a copy of my quiz questions, or plagiarized someone's writing.

BG Summer 2012 Schedule of Events

Day	In class, we will talk about...	After class, your Review Sheet (RS) is on...	After finishing the review sheet, take a break and then READ...
			Anastasi, 1998.
Mon. 5/21	-Historical foundations of IDBG -History of testing	RS1: Lecture; Anastasi, 1998.	Green, 1978. Sackett et al., 2008.
Tues. 5/22	-Measurement -Validity and fairness	RS2: Lecture; Green, 1978; Sackett et al., 2008	Baker, 2004, Ch. 2. Baker, 2004, Ch. 3.
Wed. 5/23	-Sources of individual differences: Genes -Sources of individual differences: Environment, G-E correlations, G-E interactions	RS3:Lecture; Baker, 2004, Ch. 2 and 3	Baker, 2004: Ch. 4.
Thurs. 5/24	-Family research: Twin, adoption, and combination designs (What twin and family designs can tell us about smoking and drinking)	RS4: Lecture; Baker, 2004: Ch. 4	Seligman, 1992: Ch. 1, 2, 3. Deary, 2001: Ch. 1. Waterhouse, 2006.
Fri. 5/25	-Structure and measurement of mental abilities -Emotional intelligence	RS5:Lecture; Seligman, 1992, Ch. 1-3; Deary, 2001, Ch. 1; Waterhouse, 2006	Gottfredson, 1997a. Deary, 2001: Ch. 4. Gottfredson, 1997b.
Tues. 5/29	-Causes of individual differences in mental ability; rearing effects on <i>g</i> -Implications: the nomothetic span of <i>g</i>	RS6:Lecture; Gottfredson, 1997a, 1997b; Deary, 2001, Ch. 4	**Benbow & Stanley, 1996. Hedges & Nowell, 1995. Kleinfeld, 1999.
Wed. 5/30	-IDs, mental ability, and human capital -Sex differences in mental abilities	RS7:Lecture; Benbow & Stanley, 1996; Hedges & Nowell, 1995; Kleinfeld, 1999	McCrae & Costa, 1994. Carey, 2003: Ch. 22. Lykken & Tellegen, 1996.
Thurs. 5/31	-Structure and measurement of personality traits -Causes of IDs in personality traits	RS8:Lecture; McCrae & Costa, 1994; Carey, 2003, Ch. 22; Lykken & Tellegen, 1996	Buss, 1985. Lykken & Tellegen, 1993. Jockin et al., 1996.
Fri. 6/1	-Marriage and assortment -Personality, marriage, and divorce	RS9:Lecture; Buss, 1985; Lykken & Tellegen, 1993; Jockin et al., 1996	Lykken et al., 1993.
Mon. 6/4	-Structure and measurement of vocational interests and work values -Causes and implications of individual differences in interests and values	RS10:Lecture; Lykken et al., 1993	Lubinski & Benbow, 2006. **Summers, 2005. **Pinker, 2005.
Tues. 6/5	-Sex, mental abilities, vocational interests, and social policy	RS11:Lecture; Lubinski & Benbow, 2006; Summers, 2005; Pinker, 2005	Rieger et al., 2008. Ellis et al., 2003.
Wed. 6/6	-Sexual orientation -Sexual onset and sexual behavior	RS12: Lecture; Rieger et al., 2008; Ellis et al., 2003	Brody et al., 2009. Kendler, 2001.
Thurs. 6/7	-Substance use and abuse -Body weight, eating disorders, and exercise	RS13: Lecture; Brody et al., 2009; Kendler, 2001	(Prepare final reflection)
Fri. 6/8	-Catch-up/Reflections -Student evaluations of instruction	☺	☺

Full citations

- Anastasi, A. (1998). *Psychological testing* (Ch. 1: Functions and origins of psychological testing) (6th ed.). New York: Macmillan.
- Green, B. F. (1978). In defense of measurement. *American Psychologist*, 33, 664-670.
- Sackett, P. R., Borneman, M. J., & Connelly, B. S. (2008). High-stakes testing in higher education and employment: Appraising the evidence for validity and fairness. *American Psychologist*, 63, 215-227.
- Baker, C. (2004). *Behavioral genetics* (Ch. 2: How do genes work within their environments?). American Association for the Advancement of Science. Washington, DC.
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- Deary, I. J. (2001). *Intelligence: A very short introduction* (Ch. 1: To see *g* or not to see *g*). London: Oxford University Press.
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- Jockin, V., McGue, M., & Lykken, D. T. (1996). Personality and divorce: A genetic analysis. *Journal of Personality and Social Psychology*, 71, 288-299.
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